



X-Plain™

TURP

Reference Summary

Benign prostatic hyperplasia is a common condition that affects millions of men. It could make it hard for men to urinate. An operation may be needed to relieve these symptoms. This reference summary will help you better understand this problem and its treatment options, including surgery.

Anatomy

Humans usually have two kidneys. The kidneys continuously filter the blood and make urine. The urine flows to the bladder through two specialized tubes called ureters. Urine is stored in the bladder until urination occurs. A specialized muscle known as the “internal sphincter” at the outlet or neck of the bladder prevents the urine from dribbling all the time. When the bladder is full, you feel an urge to urinate. When we urinate we cause our bladder to contract and the sphincter to relax. This allows the urine to pass to the outside through the urethra, located inside the penis.

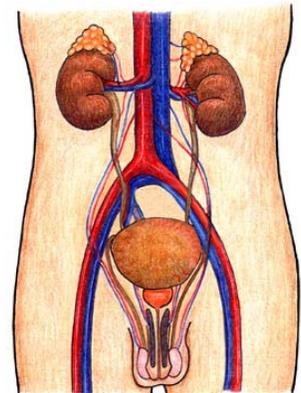
The penis is also used for procreation. The sperm is made in the two testicles located in the scrotum. From there the sperm travels to the prostate through two specialized tubes called “vasa deferentia.” The sperm is mixed with a special secretion from the prostate and the two seminal vesicles, which are located near the outlet of the bladder.

The prostate actually surrounds the urethra. The combination of sperm from the testicles and the secretions from the prostate and the seminal vesicles (semen) is stored in the seminal vesicles.

During ejaculation, the semen is forced to the outside through the urethra. The bladder neck sphincter, mentioned earlier, prevents the semen from going backward into the bladder, a condition known as “retrograde ejaculation.”

The urethra runs through the penis and usually opens at its tip.

Two other structures known as “corpora cavernosa” run alongside the urethra. On stimulation they fill up with blood causing the penis to become erect. The penis has different nerves that regulate erection. Some of these nerves send messages to the brain, telling it that the genitalia are being stimulated. This causes partial arousal. Other nerves from the brain and spinal cord,



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known as “parasympathetic” nerves, cause the corpora cavernosa to engorge with blood, resulting in erection of the penis. Other nerves known as “sympathetic” nerves control ejaculation.

Symptoms And Their Causes

Benign growth of the prostate, or benign prostatic hyperplasia, is a common condition of older men. This can cause pressure on the urethra and can block the bladder outlet making it hard to start and maintain the urinary stream. Men with this problem feel like they have to urinate frequently but are unable to empty their bladder completely.

The problem could become very serious if the pressure makes urination very restricted or impossible. This is known as “urinary retention.” The pressure in the bladder may rise and damage the kidneys.

Other Treatments

Non-surgical treatment of benign prostatic hyperplasia includes oral medications. Some medications can reduce prostate size and others can relax the smooth muscle tone of the prostate.

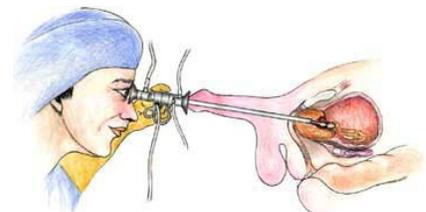
If medical therapy fails, and the symptoms become intolerable, or if the kidneys are threatened, surgery may be needed to take some of the prostate out and take the pressure off the urethra. Different procedures have been devised to achieve these two goals.

The best procedure in your case is determined by your specific condition and your doctor’s experience and philosophy. This module will explain the transurethral resection of prostate also known as TURP.

Procedure

This operation is usually done under general, epidural, or spinal anesthesia. After the penis is anesthetized, a scope is inserted in the urethra until the prostate is seen. The excess prostatic tissue that is blocking the urethra is then taken out using a resectoscope, a special instrument used to take the prostate tissue out. The procedure is commonly referred to as reaming out or roto-rooter.

When the surgeon is satisfied that the pressure is taken off the urethra and enough prostate tissue is taken out, a catheter tube is placed in the bladder to allow easy urination for the postoperative period. This ends the procedure.



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The prostatic tissue removed during surgery is examined by a pathologist to make sure there are no abnormalities such as cancer. The patient may stay in the hospital for a few days. The catheter is taken out a few days after the surgery. It is normal after the operation to have blood in the urine. This should clear as time goes by. After discharge from the hospital, the patient may complain of some burning when he urinates. This is also normal.

Risks And Complications

The surgery is safe. There are, however, several possible risks and complications. These are unlikely but possible. You need to know about them just in case they happen. By being informed you may be able to help your doctor detect complications early. The risks and complications include those related to anesthesia and those related to any type of surgery. Risks related to anesthesia include, but are not limited to, heart attacks, strokes, pneumonia, blood clots in the legs, and possible allergic reactions to the anesthesia used. These risks will be discussed with you in greater detail by your anesthesiologist or nurse anesthetist.

Some of the risks are seen in any type of surgery. These include: Infections, involving the prostate, the bladder, or the pelvis. Treating infections may require long-term antibiotics and possibly catheter placement and surgery. Bleeding, either during or after the operation. In cases of significant bleeding you may require a blood transfusion. The bladder catheter may need to remain for a longer time. Removal of blood clots from the bladder may also become necessary under general or spinal anesthesia. Scars inside the urethra that could cause further problems in urination.

Other risks and complications are related specifically to these procedures. These again are not likely. However, it is important to know about them.

Retrograde ejaculation can occur. In retrograde ejaculation, the semen goes backward in the bladder rather than going out through the penis. It later shows up in the urine. This can cause the patient to become sterile, unable to have children.

The operation may also result in impotence or the inability to have an erection. This is unlikely but possible. However, there are available treatments for this condition. These treatments could include further surgery. This may happen because important nerves could be affected during the operation. The prostate may grow again and cause symptoms to happen again. This is not likely but possible. A repeat operation may be needed. After this operation, loss of control of the bladder is possible but rare. This may lead to inability to control the urine flow and the possibility of dribbling and wetting oneself.



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The prostate may grow again and cause a recurrence of the symptoms, necessitating another TURP.

Summary

Benign prostatic hyperplasia is a fairly common condition. Surgery may be necessary to help relieve the symptoms and prevent kidney damage. This operation is very successful and safe. However, complications may occur. Knowing about them will help you detect them early if they happen.

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